VOL. 661, NOS. 1 + 2 JOURNAL OF CHROMATOGRAPHY A FEBRUARY 11, 1994

CONTENTS

17TH INTERNATIONAL SYMPOSIUM ON COLUMN LIQUID CHROMATOGRAPHY, HAMBURG, MAY 9–14, 1993, PART II

APPLICATIONS (*continued*)

Proteins and their constituents

Quantitative determination of a dipeptide in personal wash liquid by capillary electrophoresis
by D. Jones, A. Scarborough and C.M. Tier (Sharnbrook, UK) 1

High-performance liquid chromatographic separation of *cis–trans* isomers of proline-containing peptides. II. Fractionation in different cyclodextrin systems (Short Communication)
by S. Friebe, B. Hartrodt, K. Neubert and G.-J. Krauss (Halle/S., Germany) 7

Purification and analytical characterization of an anti-CD4 monoclonal antibody for human therapy
by A.H. Guse, A.D. Milton, H. Schulze-Koops, B. Müller, E. Roth, B. Simmer and H. Wächter (Erlangen, Germany), E. Weiss (Munich, Germany) and F. Emmrich (Erlangen, Germany) 13

Applications of amino acid derivatization with 6-aminoquinolyl-N-hydroxysuccinimidyl carbamate. Analysis of feed grains, intravenous solutions and glycoproteins
by S.A. Cohen (Milford, MA, USA) and K.M. De Antonis (Kingston, RI, USA) 25

Kinetic study of the adsorption of human serum albumin on immobilized antibody using the split-peak effect in immunochromatography
by J. Renard and C. Vidal-Madjar (Thiais, France) 35

Advances in the high-performance liquid chromatographic determination of phenylthiocarbamyl amino acids (Review)
by I. Molnár-Perl (Budapest, Hungary) 43

Ligand-exchange high-performance liquid chromatography of fluorine-containing phenylglycine and phenylalanine
by S.V. Galushko, I.P. Shishkina and V.A. Soloshonok (Kiev, Ukraine) 51

Liquid chromatographic–mass spectrometric studies on the enzymatic degradation of gonado-tropin-releasing hormone
by M. Brudel, U. Kertscher, H. Berger and B. Mehlis (Berlin, Germany) 55

High-performance liquid chromatography of amino acids, peptides and proteins. CXXXIII. Peak tracking of peptides in reversed-phase high-performance liquid chromatography
by A.J. Round, M.I. Aguilar and M.T.W. Hearn (Clayton, Australia) 61

Determination of peptide hydrophobicity parameters by reversed-phase high-performance liquid chromatography
by S. Rothemund, E. Krause, A. Ehrlich and M. Bienert (Berlin, Germany), E. Glusa (Erfurt, Germany) and P. Verhallen (Berlin, Germany) 77

Recombinant human insulin. III. High-performance liquid chromatography and high-performance capillary electrophoresis control in the analysis of step-by-step production of recombinant human insulin
by V.E. Klyushnichenko, D.M. Koulich, S.A. Yakimov, K.V. Maltsev, G.A. Grishina, I.V. Nazimov and A.N. Wulfson (Moscow, Russian Federation) 83

Synthesis and analysis of oxidation and carbonyl condensation compounds of tryptophan
by T. Simat, K. Meyer and H. Steinhart (Hamburg, Germany) 93

Determination of tryptophan and ten of its metabolites in a single analysis by high-performance liquid chromatography with multiple detection
by U. Caruso (Genova, Italy), B. Fowler (Basle, Switzerland) and G. Minniti and C. Romano (Genova, Italy) 101

Sensitive determination of N-terminal prolyl peptides by high-performance liquid chromatography with laser-induced fluorescence detection
by T. Toyo'oka, M. Ishibashi and T. Terao (Tokyo, Japan) 105

Miscellaneous biological applications

Column-switching liquid chromatographic method for the simultaneous determination of iothalamic acid and creatinine in biological fluids
by T. Seki, Y. Orita, S. Yamamoto and N. Ueda (Osaka, Japan) and Y. Yanagihara and K. Noguchi (Kanagawa, Japan) 113

Thermospray liquid chromatography–mass spectrometry of flavonol glycosides from medicinal plants
by P. Pietta, R.M. Facino, M. Carini and P. Mauri (Milan, Italy) 121

Evaluation of the analysis of cholesterol oxides by liquid chromatography
by B.H. Chen and Y.C. Chen (Taipei, Taiwan) 127

Determination of catecholamines by automated pre-column derivatization and reversed-phase column liquid chromatography with fluorescence detection
by J. Kehr (Stockholm, Sweden) 137

Correlative retention time peak identification method for glycated haemoglobin in high-performance liquid chromatography
by M. Ito, J. Miura, M. Ito, F. Umesato, K. Yasuda and Y. Takata (Katsuta, Japan) and B. Stanislawski (Darmstadt, Germany) 143

On-line solid-phase extraction with automated cartridge exchange for liquid chromatographic determination of lipophilic antioxidants in plasma
by M. Hedenmo and B.-M. Eriksson (Mölndal, Sweden) 153

Purification of human tumour necrosis factor by membrane chromatography
by J. Luksa, V. Menart, S. Milicic, B. Kus and V. Gaberc-Porekar (Ljubljana, Slovenia) and D. Josic (Vienna, Austria) 161

Determination of glycoalkaloids in potato tubers by reversed-phase high-performance liquid chromatography
by R.J. Houben and K. Brunt (Groningen, Netherlands) 169

Determination of aflatoxins in food by use of an automatic work station
by G. Niedwetzki and G. Lach (Hamburg, Germany) and K. Geschwill (Idstein/Ts., Germany) 175

High-performance liquid chromatographic method for the simultaneous detection of malonaldehyde, acetaldehyde, formaldehyde, acetone and propionaldehyde to monitor the oxidative stress in heart
by G.A. Cordis (Farmington, CT, USA), D. Bagchi (Omaha, NE, USA) and N. Maulik and D.K. Das (Farmington, CT, USA) 181

Pre-column derivatization of biogenic amines and amino acids with 9-fluorenylmethyl chloroformate and heptylamine
by J. Kirschbaum and B. Luckas (Stuttgart, Germany) and W.-D. Beinert (Darmstadt, Germany) 193

Other applications

Determination of amines in wines by high-performance liquid chromatography with electrochemical coulometric detection after precolumn derivatization
by G. Achilli and G.P. Cellerino (Parabiago, Italy) and G. Melzi d'Eril (Pavia, Italy) 201

Analytical study of polyoxyethylene surfactants of high degree of condensation by normal-phase liquid chromatography on *p*-nitrophenyl-bonded silica
by P.L. Desbène (Evreux, France) and B. Desmazieres (Mont Saint Aignan, France) 207

Composition distribution separation of methyl methacrylate–methacrylic acid copolymers by normal-phase gradient elution high-performance liquid chromatography
by T.C. Schunk (Rochester, NY, USA) 215

Quantitative polymer composition characterization with a liquid chromatography–Fourier transform infrared spectrometry–solvent-evaporation interface
by T.C. Schunk (Rochester, NY, USA) and S.T. Balke and P. Cheung (Toronto, Canada) 227

Retention behaviour of tributylphenol ethylene oxide oligomers on an alumina high-performance liquid chromatographic column
by E. Forgács and T. Cserháti (Budapest, Hungary) 239

ELECTROPHORESIS

Simultaneous determination of benzotriazole copper inhibitor and microbiocidal isothiazolinenones by high-performance liquid chromatography
by A. Iob, F. Al-Yousef, B.S. Tawabini, A.I. Mohammed and N.M. Abbas (Dhahran, Saudi Arabia) 245

Low-molecular-mass p*I* markers for isoelectric focusing
by K. Šlais and Z. Friedl (Brno, Czech Republic) 249

Factors affecting the performance of sodium dodecyl sulfate gel-filled capillary electrophoresis
by K. Tsuji (Kalamazoo, MI, USA) 257

Numerical algorithms for capillary electrophoresis
by S.V. Ermakov, M.S. Bello and P.G. Righetti (Milan, Italy) 265

Analysis of derivatized peptides by capillary electrophoresis
by K.M. De Antonis and P.R. Brown (Kingstown, RI, USA) and Y.-F. Cheng and S.A. Cohen (Milford, MA, USA) 279

Indirect fluorescence determination of lactate and pyruvate in single erythrocytes by capillary electrophoresis
by Q. Xue and E.S. Yeung (Ames, IA, USA) 287

Comparative study of non-porous anion-exchange chromatography, capillary gel electrophoresis and capillary electrophoresis in polymer solutions in the separation of DNA restriction fragments
by C. Sumita, Y. Baba, K. Hide, N. Ishimaru, K. Samata, A. Tanaka and M. Tsuhako (Kobe, Japan) 297

Electrophoresis of proteins in uncoated capillaries with amines and amino sugars as electrolyte additives
by D. Corradini, A. Rhomberg and C. Corradini (Rome, Italy) 305

Preparation and characterization of a stable polyacrylamide sieving matrix-filled capillary for high-performance capillary electrophoresis
by M. Nakatani (Hyogo, Japan) and A. Skibukawa and T. Nakagawa (Kyoto, Japan) 315

AUTHOR INDEX VOLS. 660 AND 661 323